

CLAIMS

1. An apparatus for attaching a solid solder element to a solderable substrate, comprising:
 - 5 an adhesive material applied to a portion of the solid solder element so as to overlap with the solderable substrate outside of a predefined area reserved for subsequent component placement, the adhesive material immobilizing the solid solder element during reflow.

2. An assembly, comprising:
 - a solderable substrate;
 - a solid solder element;
- 5 a component for coupling to the solderable substrate via the solid solder element during a reflow process; and
- an adhesive material for immobilizing the solid solder element to the solderable substrate prior to the reflow process.
- 10 3. The assembly of claim 2, wherein the adhesive material is cured prior to the reflow process.

4. An interface apparatus for component attachment, comprising:
 - a solderable substrate;
 - a solid solder element; and
- 5 an adhesive material for coupling the solid solder element to the solderable substrate, the adhesive material overlapping the solderable substrate and the solid solder element, the adhesive material cured so as to immobilize the solid solder element; and
 - the component subsequently being coupled to the solderable substrate via the solid solder element during a reflow process.
- 10
5. The interface apparatus of claim 4, wherein the component is at least one of mechanical, electrical, and electro-mechanical components.
- 15
6. The interface apparatus of claim 4, wherein the adhesive material is characterized by a predetermined application viscosity, predetermined volume reduction during the reflow process, retention of adhesive qualities during the reflow process, and an inability to mix with the solid solder element during the reflow process.

20

7. An interface apparatus for component attachment, comprising:
 - a solderable substrate;
 - a solid solder element; and
 - an adhesive material having predetermined geometry and adhesive properties
- 5 cured so as to couple the solid solder element to the solderable substrate; and
 the component subsequently being coupled to the solderable substrate via the solid solder element during a post cure reflow process during which the adhesive material maintains its geometry and adhesive properties.

10